

# Cooperative Development Inside Communities

Jeff Osier-Mixon

MontaVista Software, Inc.

Embedded Linux Conference 2009  
Kabuki Hotel, San Francisco, CA

# Who is Jeff?

- Veteran technical writer
- Embedded open-source greybeard: has worked in embedded open-source software and related hardware for 17 yrs (OMG)
- Experienced web guru: created one of the first corporate websites and intranets in 1994 (and hasn't stopped since)
- Longtime community volunteer in many areas: homeschooling, airport, Habitat, historical society
- Developer advocate and open-source blogger at <http://www.jefro.net/blog>

# Why is he talking to us?

- Passionate about community and its potential for research efficiency, developer harmony, and world peace
- Sees something missing in the Linux community and wants to help
- Admin for MontaVista's new developer community

# Who is MontaVista Software?

- Leader in embedded software solutions based on Linux
- Major developer of real-time features
- Major innovator and code submitter to mainline
- A company of developer advocates

# Community-Oriented Software Development

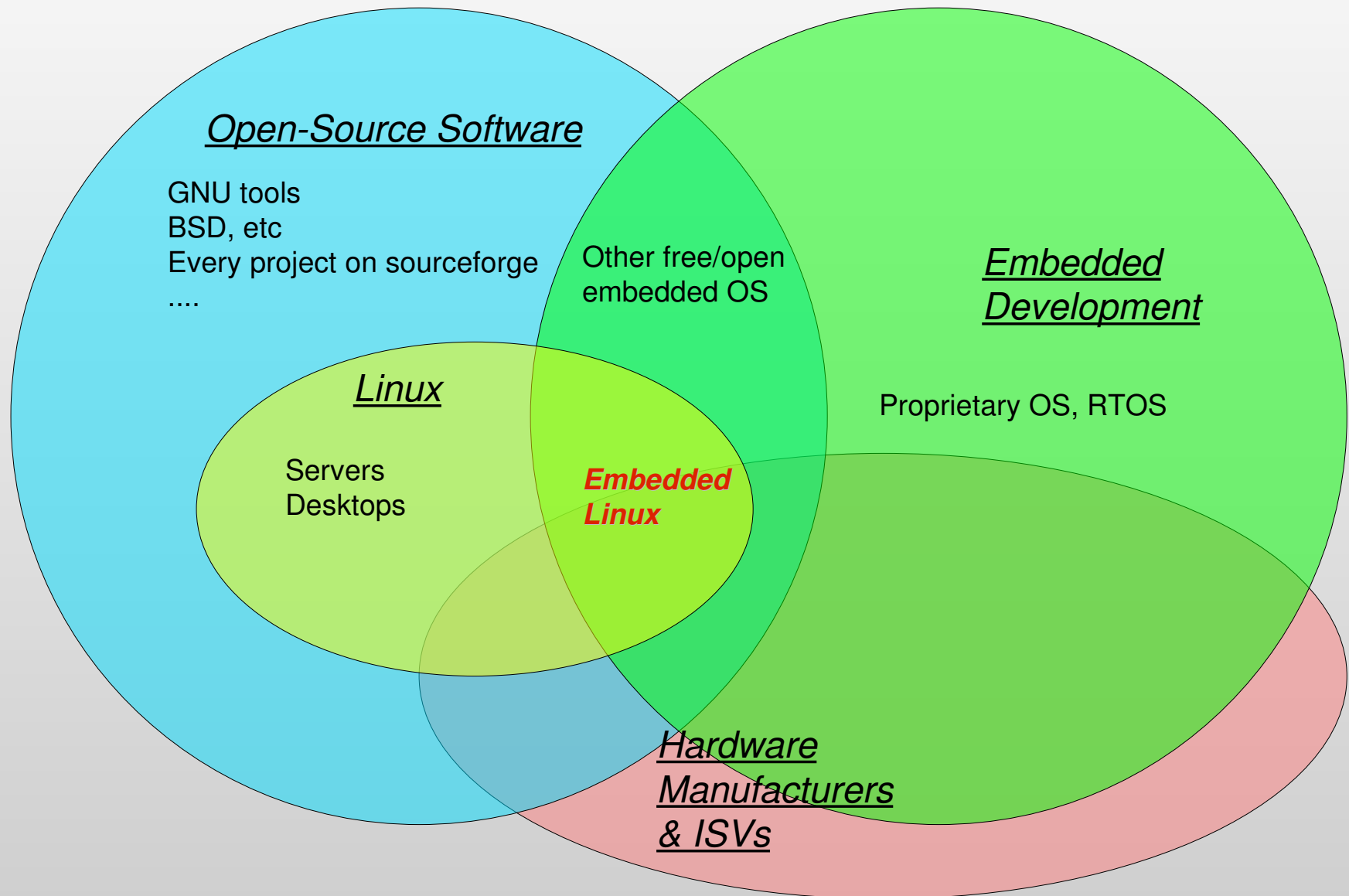
# The Benefits of Community-Based Development

- Preaching to the converted

# The Caveats of Community-Based Development

- Still preaching to the converted

# Who is the Community?



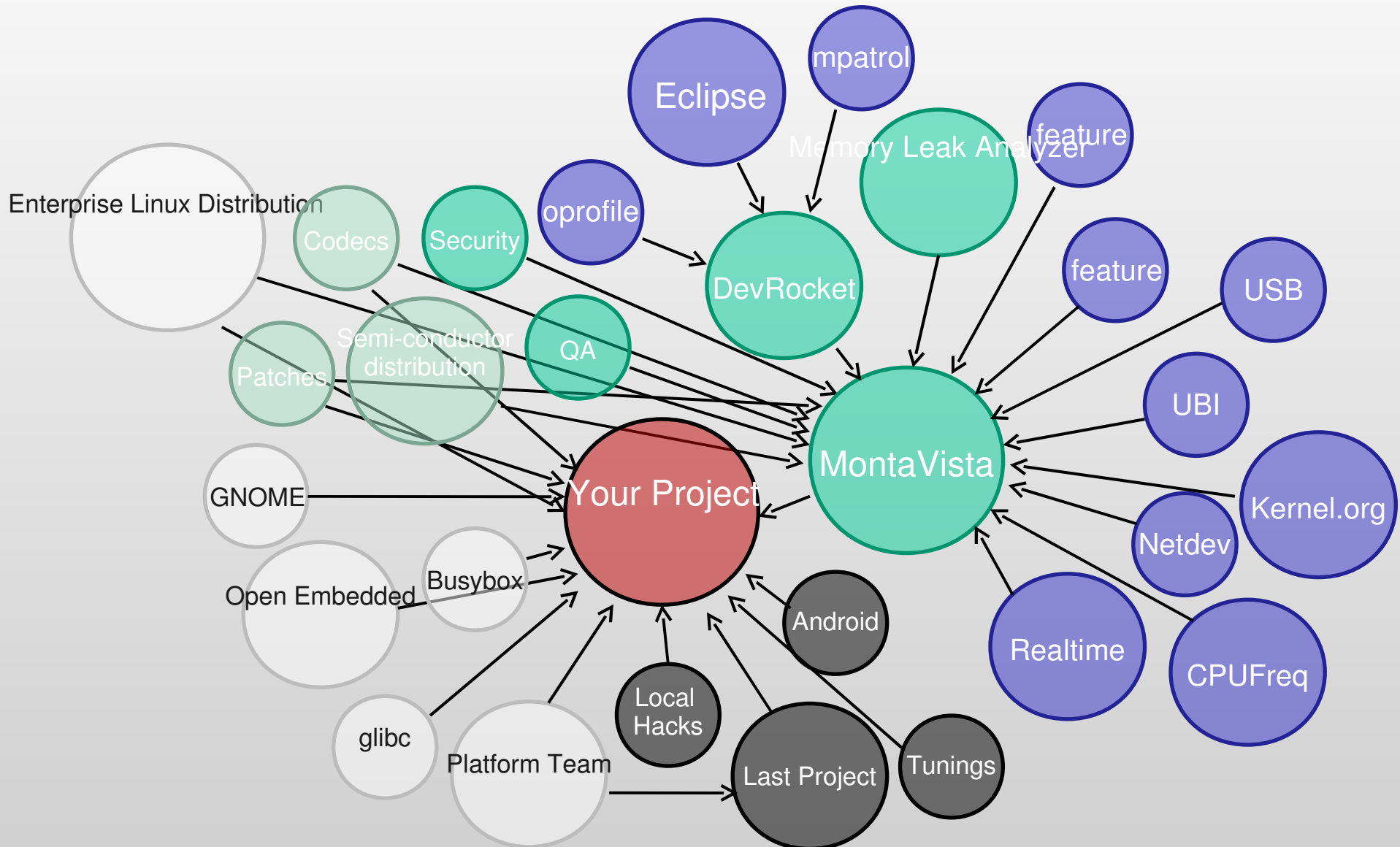


# Let's Look Closer at the Embedded Linux Community and its challenges

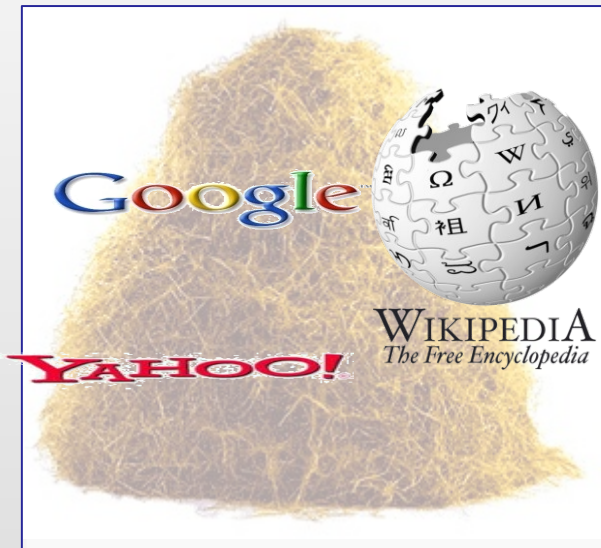
Because it's not “the” community you are after.

It is YOUR community you want---the one that answers  
your questions and enables your participation

# One View of the Embedded Linux Community



# Finding a Needle in Multiple Haystacks



# People, Not Pages



Vs.

A screenshot of a Google search results page. The search bar at the top contains the text "display applications remotely". To the right of the search bar is a "Search" button and links for "Advanced Search" and "Preferences". Below the search bar, the text "Results 1 - 10 of about 11,800 for display applications remotely" is displayed. The number "11,800" is highlighted with a red box. The search results list several links, including "Displaying Ubuntu Linux Applications Remotely (X11 Forwarding ...)", "How to: Linux display remote X application over telnet session", "Can't open display" Error when running X applications remotely ..., "Remote Control with VNC | Linux Magazine", and "Running applications remotely with X11 The display concept".

display applications remotely Search Advanced Search Preferences

Google

Web Results 1 - 10 of about 11,800 for display applications remotely

[Displaying Ubuntu Linux Applications Remotely \(X11 Forwarding ...\)](#)  
Jul 9, 2007 ... If the system is running Windows, however, then you must install an X server on it before you can **display applications** from a **remote** system. ...  
[www.techotopia.com/index.php/Displaying\\_Ubuntu\\_Linux\\_Applications\\_Remotely\\_\(X11\\_Forwarding\)](#) - 17k - [Cached](#)

[How to: Linux display remote X application over telnet session](#)  
Q. How do I **display remote X application** over telnet session? I am login over VPN so telnet security is not a big issue here. But whenever I login over ...  
[www.cyberciti.biz/faq/unable-to-display-remote-x-applications-through-telnet-in-linux/](#)

["Can't open display" Error when running X applications remotely ...](#)  
6 posts - 5 authors - Last post: Jul 27, 2008  
"Can't open **display**" Error when running X **applications remotely** ... I am trying to run graphical **applications remotely** in my Fedora Core 6 ...  
[groups.google.com/group/comp.os.linux.x/browse\\_thread/thread/d4f63501196bf081](#) - 83k - [Cached](#)

["Can't open display" Error when running X applications remotely ...](#)  
6 posts - 4 authors - Last post: Jun 20, 2007  
"Can't open **display**" Error when running X **applications remotely** Linux ... But trying to do it by changing **DISPLAY** variable is not working. ...  
[www.linuxquestions.org/questions/linux-networking-3/cant-open-display-error-when-running-x-applications-remotely-562864/](#) - 60k - [Cached](#)

[Remote Control with VNC | Linux Magazine](#)  
On Linux, we now have both SCO's Tarantella and GraphOn's Bridges, which allow you to run X and Microsoft Windows **applications remotely** and **display** them in ...  
[www.linux-mag.com/id/649](#) - 58k - [Cached](#)

[If222, UNIXBasics: Running applications remotely with X11](#)  
Although it is easy to run an **application remotely** there is still this extra bit of typing needed to set the **DISPLAY**. It is possible to automate this: ...  
[www.linuxfocus.org/English/January2002/article222.shtml](#) - 19k - [Cached](#)

[\[PDF\] Running applications remotely with X11 The display concept](#)

Over 12,000 results

# The Challenges

Embedded Linux development is  
information intensive

**Locate information, hardware and software**

**Validate information, credibility and completeness**

**Adapt information, specific project needs**

# A Proposed Solution

An embedded Linux community that connects all engineers

- Connect:** Leverage the experience of other embedded Linux developers
- Share:** Collaborate on information and ideas
- Design:** Develop products faster with information re-use



An embedded Linux community by MontaVista

Embedded Linux community,  
For systems engineers,  
To connect and share information, ideas, and  
software,  
Unlike search engines, Meld directly connects  
experienced systems engineers to assist one  
another on specific projects and to design  
commercial-ready embedded devices.



# Meld...

IS	IS NOT
Community of embedded Linux <u>users</u>	An open source project for code development
Supporting commercial device development	Targeting academic, research, hobbyist development
Connecting embedded developers who use Linux, connecting communities	Replacement for already existing communities
Embedded: device-specific root filesystem	Enterprise/desktop: one-size-fits-all distribution
Public, open	MontaVista customers only, paid for, application specific



# Welcome to Meld

meld.mvista.com



connectshare design

An embedded Linux community by MontaVista

Search | Browse Tags

Latest Activity

Home

Recent Discussions

Top Pages

Top Contributors

My Page

My Contacts

Search Members

By Attribute

People Map

My Profile

View My Profile

Update My Profile

Discussion Groups

View All Groups

My Groups

Personal Info

Update My Personal Info

Notification Preferences

Invite A Colleague

Getting Started

My Messages

Help/FAQ

RSS Feed for All Discussions

**Request MontaVista Info**

Logout

**How to use Meld (video)**

**Welcome from Brad Dixon,**  
**MontaVista Director of Product**  
**Management**



### Meld Community

#### Meet Your Community

Welcome to Meld, where embedded Linux developers connect and collaborate on software designs in order to bring commercial products to market!

- **Connect:** Leverage the experience of other embedded Linux developers.
- **Share:** Collaborate on information and ideas.
- **Design:** Develop products faster with information re-use.



#### Developer Spotlight



**Kurt Lloyd**  
Alcatel-Lucent

*"Meld is a well-implemented framework for facilitating effective communication among people using (or wanting to use) open source in their products. Good job putting it together!"*

Kurt has worked on a variety of high-end telecommunication products, with more to come. Kurt is currently working on a large DWDM switch, and some smaller switches using much of the same code base.

#### Discussion Groups

##### General Discussion



General discussion about embedded Linux

##### System Integration



The system integration forum is focused on the often forgotten challenge of how to take a pile of software and turn it into product. Everything from build, configuration, image creation, deployment, provisioning, and even a bit of systems management is a great topic for this forum.

Texas Instruments Platforms

#### Recent Discussions

##### System Size Reduction Pointers

Hi all,

I am looking for information about system size reduction. These sites have some information:

[http://elinux.org/System\\_Size](http://elinux.org/System_Size)  
<http://www.celinuxforum.org/CelfPubWiki/SystemSizeResources>

What I am really seeking is advice on limiting system functionality to further reduce the size,...

[DSDP TmL Open Meeting 3/20/09](#)

# Connect: Update My Interests

connectsharedesign

An embedded Linux community by MontaVista

Search | Browse

Latest Activity

Home

Recent Discussions

Top Pages

Top Contributors

My Profile

My Contacts

Search Members

By Attribute

People Map

My Profile

View My Profile

Update My Profile

Discussion Groups

View All Groups

My Groups

Personal Info

Update Personal Info

Notification Preferences

Invite A Colleague

Getting Started

My Messages

Help/FAQ

Welcome!

This system empowers you to quickly identify others with whom you can communicate, exchange knowledge, schedule meetings, and share ideas. To get started, just follow these three easy steps:

1. Update Your Profile

Click the [Update My Profile](#) link and describe a few things about yourself or your company. You can provide as much or as little information as you wish.

2. Update Your Interests


Click the [Update My Interests](#) link and specify the attributes of those individuals with whom you would most like to meet.

3. Match With Others


After you complete the first two steps, this system will automatically build a list of individuals whom most closely match your interests. At this point, use the [People Map](#) to browse your network and request introductions, schedule meetings, and share ideas with others.

What Else Can I Do?

To get even more out of this system, upload your photograph, share your portfolio, or participate in group discussions. Make this system work for you!

General discussion about embedded Linux

System Integration

The system integration forum is focused on the often forgotten challenge of how to take a pile of software and turn it into product. Everything from build, configuration, image creation, deployment, provisioning, and even a bit of systems management

I'm curious to see what specific or types of tools developers are using most frequently of course of their development nowadays? (opm patrol, lttng, strace, ltrace, kgdb, gdb, wireprintk's, etc) What types of tools would you and want to use?

[Integrated Linux board with GSM module and](#)

Dear all,

# Connect: Update My Profile

Please Tell Us About Yourself!

Please indicate the architectures that you use in development  
(select all that are relevant).

<input checked="" type="checkbox"/> arm_v5	<input type="checkbox"/> mips64	<input type="checkbox"/> ppc_83xx
<input type="checkbox"/> arm_v6	<input type="checkbox"/> ppc_440	<input type="checkbox"/> ppc_85xx
<input type="checkbox"/> arm_v7	<input type="checkbox"/> ppc_7xx	<input type="checkbox"/> ppc_9xx
<input checked="" type="checkbox"/> arm_xscale	<input type="checkbox"/> ppc_74xx	<input checked="" type="checkbox"/> x86 (32-bit)
<input type="checkbox"/> mips32	<input type="checkbox"/> ppc_8xx	<input checked="" type="checkbox"/> x86 (64-bit)

Please identify the host operating system you use most often for embedded development  
(select one from Host OS list below)

Windows XP

If other please indicate:

Please indicate what functions you perform on your current project  
(select all that apply)

☒ Firmware, boot code

☐ Toolchain management: updates, bugfixes, trouble-shooting

☒ Software development infrastructure: Source Control Management, build

☐ Kernel features: kernel config, feature/patch management

☒ Device drivers

☐ System configuration: configuration files, daemon configuration

☐ Middleware: userland components not directly visible to users

☐ Applications: userland components directly visible to users

☐ Documentation: communication of product info

☐ Field engineering / technical marketing: communicating product information to customers and partners

☐ Testing / QA: verifying product functionality and performance characteristics

☐ Architect: Overall system design, software component selection

☐ Project management:

☐ Other

If other please indicate:

Please share a few words about yourself:

System designer focusing on industrial control systems for auto-manufacturing

# Connect: Update My Interests



## Who Would You Like to Meet?

I would like to meet members performing the following functions:

- ☐ Firmware, boot code
- ☐ Toolchain management: updates, bugfixes, trouble-shooting
- ☐ Software development infrastructure: Source Control Management, build
- ☐ Kernel features: kernel config, feature/patch management
- ☐ Device drivers:
- ☐ System configuration: configuration files, daemon configuration
- ☐ Middleware: userland components not directly visible to users
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- ☐ Testing / QA: verifying product functionality and performance characteristics
- ☐ Architect: Overall system design, software component selection
- ☐ Project management:
- ☐ Other

I would like to meet members using these architectures for development. (If your architecture is not shown, please let us know at [community@mvista.com](mailto:community@mvista.com).)

- |                                     |                                   |                                       |
|-------------------------------------|-----------------------------------|---------------------------------------|
| <input type="checkbox"/> arm_v5     | <input type="checkbox"/> ppc_440  | <input type="checkbox"/> ppc_85xx     |
| <input type="checkbox"/> arm_v6     | <input type="checkbox"/> ppc_7xx  | <input type="checkbox"/> ppc_9xx      |
| <input type="checkbox"/> arm_xscale | <input type="checkbox"/> ppc_74xx | <input type="checkbox"/> x86 (32-bit) |
| <input type="checkbox"/> mips2      | <input type="checkbox"/> ppc_8xx  | <input type="checkbox"/> x86 (64-bit) |
| <input type="checkbox"/> mips64     | <input type="checkbox"/> ppc_83xx |                                       |

With the following Host OS

- |                                       |                                       |                                    |
|---------------------------------------|---------------------------------------|------------------------------------|
| <input type="checkbox"/> Fedora Linux | <input type="checkbox"/> Other Linux  | <input type="checkbox"/> Solaris 8 |
| <input type="checkbox"/> RedHat Linux | <input type="checkbox"/> Windows XP   | <input type="checkbox"/> Solaris 9 |
| <input type="checkbox"/> Suse Linux   | <input type="checkbox"/> Windows 2000 | <input type="checkbox"/> Other     |

What are your top objectives for joining the community?

# Connect: Update My Interests



## Who Would You Like to Meet?

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- ☐ System configuration: configuration files, daemon configuration
- ☐ Middleware: userland components not directly visible to users
- ☐ Applications: userland components directly visible to users
- ☐ Documentation
- ☐ Field engineering
- ☐ Testing ☒ Notify me when members join who may be of interest to me.
- ☐ Architecture
- ☐ Project management:
- ☐ Other

I would like to meet members using these architectures for development. (If your architecture is not shown, please let us know at [community@mvista.com](mailto:community@mvista.com).)

- |                                     |                                   |                                       |
|-------------------------------------|-----------------------------------|---------------------------------------|
| <input type="checkbox"/> arm_v5     | <input type="checkbox"/> ppc_440  | <input type="checkbox"/> ppc_85xx     |
| <input type="checkbox"/> arm_v6     | <input type="checkbox"/> ppc_7xx  | <input type="checkbox"/> ppc_9xx      |
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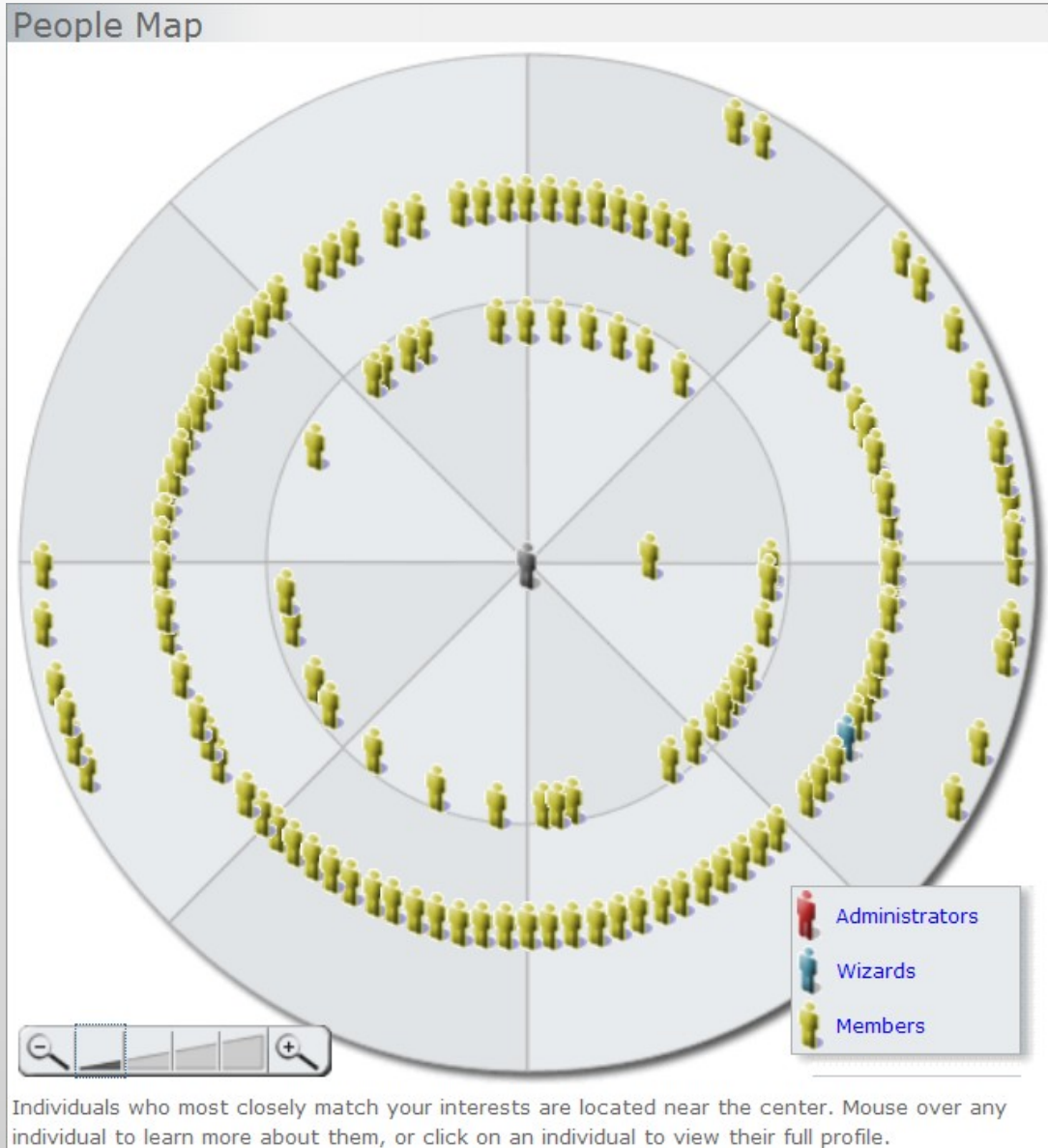
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What are your top objectives for joining the community?



# Connect: People Map



Filter

**My Information** *Interests*

▼ **Architecture**

Select All Unselect All

<input checked="" type="checkbox"/> arm_v5	<input checked="" type="checkbox"/> arm_v6
<input checked="" type="checkbox"/> arm_v7	<input checked="" type="checkbox"/> arm_xscale
<input checked="" type="checkbox"/> mips32	<input checked="" type="checkbox"/> mips64
<input checked="" type="checkbox"/> ppc_440	<input checked="" type="checkbox"/> ppc_74xx
<input checked="" type="checkbox"/> ppc_7xx	<input checked="" type="checkbox"/> ppc_83xx
<input checked="" type="checkbox"/> ppc_85xx	<input checked="" type="checkbox"/> ppc_8xx
<input checked="" type="checkbox"/> ppc_9xx	<input checked="" type="checkbox"/> x86 (32-bit)
<input checked="" type="checkbox"/> x86 (64-bit)	

▼ **Host OS**

Select All Unselect All

<input checked="" type="checkbox"/> Fedora Linux	<input checked="" type="checkbox"/> Other
<input checked="" type="checkbox"/> Other Linux	<input checked="" type="checkbox"/> RedHat Linux
<input checked="" type="checkbox"/> Solaris 8	<input checked="" type="checkbox"/> Solaris 9
<input checked="" type="checkbox"/> Suse Linux	<input checked="" type="checkbox"/> Windows 2000
<input checked="" type="checkbox"/> Windows Vista	<input checked="" type="checkbox"/> Windows XP

▼ **Other Host OS**

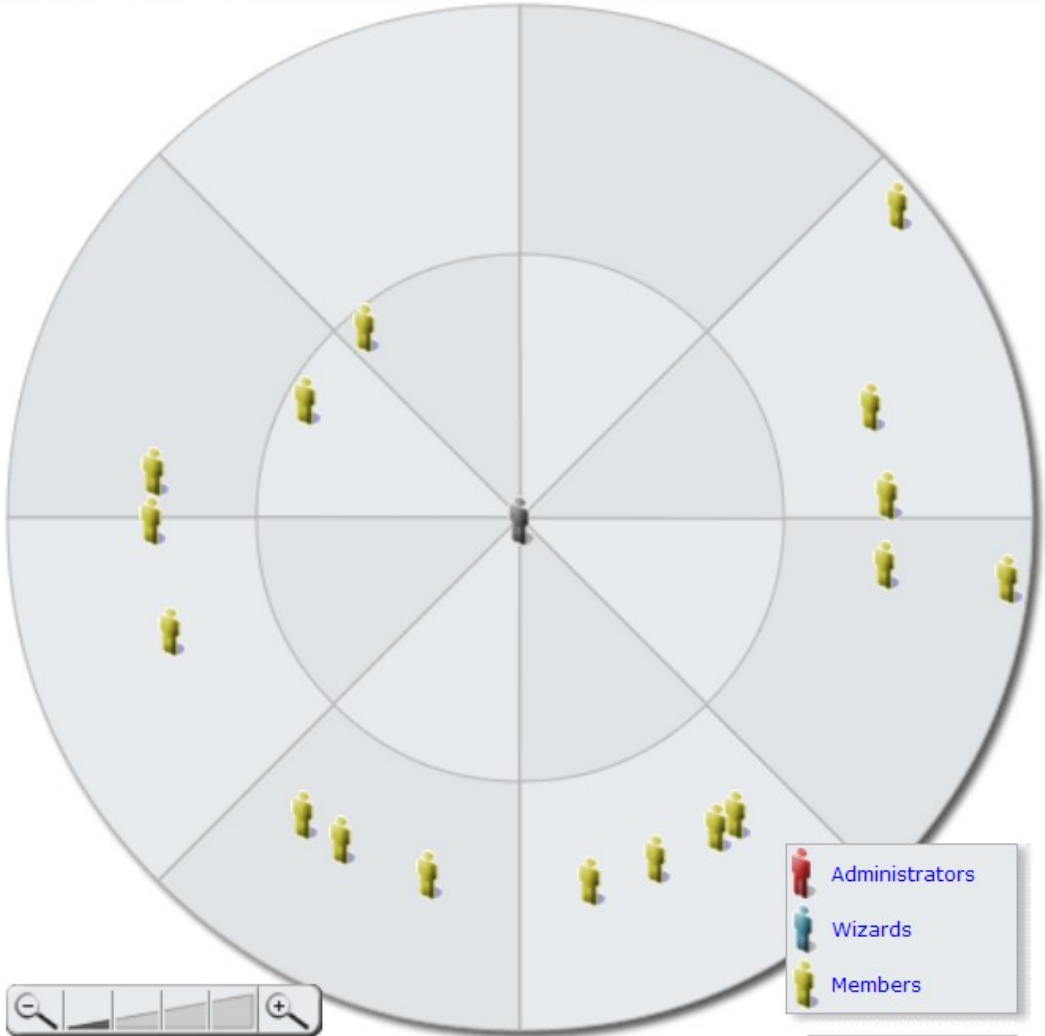
Search text

▼ **Functions**

Select All Unselect All

# Connect: People Map Filter

People Map



Administrators

Wizards

Members

Individuals who most closely match your interests are located near the center. Mouse over any individual to learn more about them, or click on an individual to view their full profile.

Filter

My Information

Interests

▼ Architecture

Select All   Unselect All

<input checked="" type="checkbox"/> arm_v5	<input checked="" type="checkbox"/> arm_v6
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Select All   Unselect All

<input type="checkbox"/> Fedora Linux	<input type="checkbox"/> Other
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<input type="checkbox"/> Windows Vista	<input type="checkbox"/> Windows XP

▼ Other Host OS

Search text

▼ Functions

Select All   Unselect All

# Connect: View Profile

## People Map

**ptrmike**

A guy who makes a living from helping customers understand and use Linux in their products.

[View Profile](#)

Administrators

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## Filter

My Information	Interests
<b>Architecture</b>	
Select All   Unselect All	
<input checked="" type="checkbox"/> arm_v5	<input checked="" type="checkbox"/> arm_v6
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<input type="checkbox"/> ppc_9xx	<input checked="" type="checkbox"/> x86 (32-bit)
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<b>Host OS</b>	
Select All   Unselect All	
<input type="checkbox"/> Fedora Linux	<input type="checkbox"/> Other
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<input type="checkbox"/> Windows Vista	<input type="checkbox"/> Windows XP
<b>Other Host OS</b>	
Search text	
<b>Functions</b>	
Select All   Unselect All	



# Connect: User Profiles

ptrmike

Member since February 27, 2009 | [My Activity](#)



## About Me

A guy who makes a living from helping customers understand and use Linux in their products.

## I Am Looking For

To be able to see what others are doing to solve the same problems that I am. We're all in the same boat and somebody surely has an idea of which end of the oar to grab.

## My Community Activity



Top Contributor

Total Contributions 28



[Send a message](#)



[Request a meeting](#)



[Add to contacts](#)

### ABOUT ME

#### Architecture

[arm\\_v5](#), [arm\\_v6](#), [arm\\_v7](#),  
[arm\\_xscale](#), [mips32](#), [mips64](#),  
[ppc\\_440](#), [ppc\\_8xx](#), [ppc\\_83xx](#),  
[ppc\\_85xx](#), [x86 \(32-bit\)](#), [x86 \(64-bit\)](#)

#### Host OS

[Other Linux](#)

#### Other Host OS

[Ubuntu](#)

#### Functions

[Firmware](#), [boot code](#), [Toolchain management: updates, bugfixes, trouble-shooting](#), [Software development infrastructure: Source Control Management, build](#), [Kernel features: kernel](#)

### [async. notofication using signals from kernel space to userland](#)

Yes, spawn a thread that blocks on a read in your driver. Then, have the interrupt, timer, whatever do a `wake_up_interruptible` to the driver to release the blocked read. That should be much faster than using [more...](#)

17 hours ago | 1

### [System integration webinar](#)

Although I certainly understand David Woodhouse's perspective on always having the latest kernel, I feel it neglects the reality of manufacturing and QA. Any change that you make to a product's software [more...](#)

3/19/2009 3:43 PM | 3

### [Polling GPIO pin status](#)

Hmm... You'll need to be more specific. What CPU architecture are you using? Are the GPIO lines I/O mapped or memory mapped? You say you have a user-space "driver". How did you implement it? [Using more...](#)

3/19/2009 8:26 AM | 1

### [Linux on emerson MVME3100 board](#)

It could be done any of the ways you've outlined. Since I'm not from Emerson and don't have access to the code, I really couldn't say how they were doing it. I'm sure you'll be able to access the bus from the [more...](#)

3/18/2009 7:42 AM | 1

### [Firmware loading using firmware.agent](#)

The firmware is typically located in `/lib/firmware`. The firmware will be loaded when your driver does the `request_firmware` call. And, did you look in at the example in `<linux>/samples/firmware_class?` [more...](#)

# Connect: Email, Meetings

ptrmike

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[Other Linux](#)

#### Other Host OS

[Ubuntu](#)

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# Connect: Learn More About Melders

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**ABOUT ME**

Architecture  
[arm\\_v5](#), [arm\\_v6](#), [arm\\_v7](#),  
[arm\\_xscale](#), [mips32](#), [mips64](#),  
[ppc\\_440](#), [ppc\\_8xx](#), [ppc\\_83xx](#),  
[ppc\\_85xx](#), [x86 \(32-bit\)](#), [x86 \(64-bit\)](#)


Host OS  
[Other Linux](#)

Other Host OS  
[Ubuntu](#)

Source Control Management.  
build, Kernel features: kernel

# Connect: Learn More About Melders

**ptrmike**  
Member since February 27, 2009 | [My Activity](#)




**About Me**


A guy who makes a living from helping customers understand and use Linux in their products.


**I Am Looking For**


To be able to see what others are doing to solve the same problems that I am. We're all in the same boat and somebody surely has an idea of which end of the oar to grab.


**My Community Activity**

[async. notofication using signals from kernel space to userland](#)  
Yes, spawn a thread that blocks on a read in your driver. Then, have the interrupt, timer, whatever do a wake\_up\_interruptible to the driver to release the blocked read. That should be much faster than using more...  
17 hours ago |  3

[System integration webinar](#)  
Although I certainly understand David Woodhouse's perspective on always having the latest kernel, I feel it neglects the reality of manufacturing and QA. Any change that you make to a product's software more...  
3/19/2009 3:43 PM |  3


[Polling GPIO pin status](#)  
Hmm... You'll need to be more specific. What CPU architecture are you using? Are the GPIO lines I/O mapped or memory mapped? You say you have a user-space "driver". How did you implement it? Using more...  
3/19/2009 8:26 AM |  1


[Linux on emerson MVME3100 board](#)  
could be done any of the ways you've outlined. Since I'm not from Emerson and I don't have access to the code, I really couldn't say how they were doing it. I'm sure you'll be able to access the bus from the more...  
3/18/2009 7:42 AM |  1


[Firmware loading using firmware.agent](#)  
The firmware is typically located in /lib/firmware. The firmware will be loaded when your driver does the request\_firmware call. And, did you look in at the example in linux>/samples/firmware\_class? more...  
3/18/2009 7:42 AM |  1

**Top Contributor**

Total Contributions 28

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**ABOUT ME**

Architecture  
arm\_v5, arm\_v6, arm\_v7,  
arm\_xscale, mips32, mips64,  
ppc\_440, ppc\_8xx, ppc\_83xx,  
ppc\_85xx, x86 (32-bit), x86  
64-bit

**Functions**

Firmware, boot code, Toolchain  
management: updates, bugfixes,  
trouble-shooting, Software  
development infrastructure:  
Source Control Management,  
build, Kernel features: kernel  
config, feature/patch  
management, Device drivers,  
System configuration:  
configuration files, daemon

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# Share: Group Discussions

ptrmike

Member since February 27, 2009 | [My Activity](#)



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### ABOUT ME

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### async. notofication using signals from kernel space to userland

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3/19/2009 3:43 PM | 3

### Polling GPIO pin status

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3/19/2009 8:26 AM | 1

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3/18/2009 7:42 AM | 1

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<linux>/samples/firmware\_class? [more...](#)

# Share: Group Discussions

## async. notofication using signals from kernel space to userland

Posts 16 | Created 3/9/2009 7:08 AM by [ajitnatu](#) | 7

i have an ISR written as a kernel driver that handles interrupts from an external device. after getting the interrupt, i need to intimate the user application to update the app. state. currently i use `kill_proc_info()` to send signals from my kernel driver to user app. however, i have observed that the system gets slower and slower with time and finally halts. the signal frequency is around 10ms. i would appreciate if somebody can suggest better alternative for implementing such asynchronous notification from kernel to user space.



[ajitnatu](#)

[Updated on 3/9/2009 7:17 AM]

Posted 3/9/2009 7:08 AM | 1

One approach would be to hang a user thread in a perpetual blocked read to the driver. Then have the ISR issue a `wakeup_interruptible()` on the driver's read wait queue. This should work pretty reliably, although it's bound to have some jitter due to scheduling. Alternatively, you could set up a kernel thread/wait queue, give it a high priority and have the ISR data handled in kernel space by queuing it up. Then have the kernel thread issue the `wakeup_interruptible` and pass bigger chunks of data via `debugFS` to minimize the kernel-to-user space transitions. And there are probably 3-4 more alternate approaches.



[ptrmike](#)

Which one is better? Well, it depends ;-). Which CPU architecture? Clock rate of the processor? How much data is moved at a time? How "real-time" is the application? How sensitive is it to jitter? Any answer that anyone gives you will be subject to these answers and more.

HTH.

Posted 3/9/2009 7:57 AM | 4

[ajitnatu](#), if your system gets slower over time, this sounds like you have a memory leak somewhere. I'm not sure this has to do with your choice of `kill_proc_info()`, so be prepared to look for other causes. But do take a look at all structs you allocate in the kernel - are you really freeing them all?



[kaaching](#)

I have to agree with [ptrmike](#) that a blocked read on a device file is a nice, clean, reliable mechanism to get notifications to user space - and transfer some app data at the same time, saving you yet another set of user-to-kernel calls.

Posted 3/9/2009 12:49 PM | 1


hello [ptrmike](#), hello [kaaching](#),  
thanks for the information.



[ajitnatu](#)

doing a blocked read in the app. and issuing `wakeup_interruptible()` from the kernel puts the entire user space process to sleep. however, my application is a

# Share: Groups




## Groups

Interested in connecting with others with similar interests or backgrounds to yours? Browse the information below to find the groups that are right for you.

All Groups


Sort by: Number of Members ▼

### General Discussion




69 Members | 49 Discussions | 0 Files | 0 Meetings | 266 Posts | 1  
General discussion about embedded Linux

### System Integration




44 Members | 9 Discussions | 0 Files | 0 Meetings | 71 Posts | 1  
The system integration forum is focused on the often forgotten challenge of how to take a pile of software and turn it into product. Everything from build, configuration, image creation, deployment, [more...](#)

### Texas Instruments Platforms




39 Members | 7 Discussions | 0 Files | 0 Meetings | 34 Posts | 3  
Discussions about developing, modeling, and demonstrating software using Texas Instruments platforms. Please preface discussions with a uniquely identifiable term. For example, use "Beagle: " for [more...](#)

### 6IP




33 Members | 6 Discussions | 0 Files | 0 Meetings | 44 Posts | 1  
Private group for the discussion of new technology.

### DevRocket




32 Members | 21 Discussions | 1 File | 0 Meetings | 51 Posts | 1  
The goal of this group is to provide assistance in using DevRocket and to increase transparency in the DevRocket development cycle.

### Announcements




20 Members | 5 Discussions | 0 Files | 0 Meetings | 17 Posts | 1  
Project or product announcements. Note that overt marketing messages will be deleted.

### Help / FAQ



11 Members | 10 Discussions | 0 Files | 0 Meetings | 34 Posts | 1  
Stop here for information on how you can get the most out of your community

### Wizards





5 Members | 5 Discussions | 0 Files | 0 Meetings | 14 Posts | 1  
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Results 1 - 8 of 8 50 items per page ▼




# Share: Top Contributors

 **Top Contributors**

Sort by: Most Thumbs Up 

All Time This Week This Month Top Pages »


48



**kaaching**  
I'm Senior Solutions & Services Architect for MontaVista, operating out of the MontaVista Headquarters in Santa Clara, CA, USA. The first time I ran into Linux was in 1993, when I (unknowingly) used a PC to [more...](#)

64 Discussion Posts


31



**ptrmike**  
A guy who makes a living from helping customers understand and use Linux in their products.

28 Discussion Posts


30



**rbdixon**  
Read my blog: <http://mvista.com/blogs/dixon>

59 Discussion Posts | 2 Groups


22



**josiermixon**  
I am a technical writer with MontaVista, and I blog about open-source software at <http://www.jefro.net/blog>. I also am helping to create and maintain Meld, so please feel free to contact me directly with any [more...](#)

36 Discussion Posts | 4 Groups | 4 Wiki Pages


21



**tkitch**  
I'm a product marketing manager at MontaVista. I'm interested in hearing from Melders on how they like it and how we can improve!

15 Discussion Posts


16



**tbird20d**  
Architecture Group Chair, CE Linux Forum; Tracing and boot-time specialist

5 Discussion Posts

16



**bmillikan**  
Embedded software engineer

8 Discussion Posts



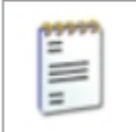
# Share: Content, Files


Files

Submit a File


Sort by: Last Post Date

Sample RPM project



Posted 2/26/2009 4:54:41 AM | [Download](#) |  1

This is a DevRocket project that I have quickly put together to demonstrate how one can use a legacy Makefile and generate RPMs. You can then integrate the generated RPMs into the Platform Image Builder.



chombourger

# Share: Notification Preferences



## Notification Preferences

Receive a notification when items of interest to you are added or changed.

### Current Settings

System Integration

 Stop Email

 Rss

Help / FAQ

 Stop Email

 Rss

DevRocket

 Stop Email

 Rss

Announcements

 Stop Email

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Texas Instruments Platforms

 Stop Email

 Rss

Notify me when members join who may be of interest to me.

 Email

# Design

## Developer Spotlight



**Kurt Lloyd**  
Alcatel-Lucent

*"Meld is a well-implemented framework for facilitating effective communication among people using (or wanting to use) open source in their products. Good job putting it together!"*

Kurt has worked on a variety of high-end telecommunication products, with more to come. Kurt is currently working on a large DWDM switch, and some smaller switches using much of the same code base.

# Why is MontaVista doing this?

- As a company, MontaVista realizes that the best return on investment comes from happy developers
- The end goal of Meld is to create happy developers
- The beyond-the-end goal is happy ISVs and hardware manufacturers, who will create more and better products for those happy developers
- MontaVista wants to foster the communication to make this possible---collaboration is king

Thanks for participating!

[meld.mvista.com](http://meld.mvista.com)

994 members, be the next one